

CLAIMS:

1. A method for continuously preparing a silicon oxide powder, comprising the steps of:

5 feeding a raw material powder mixture containing silicon dioxide powder into a reaction furnace,

heating the mixture in the furnace in an inert gas or in vacuum to a temperature of 1,100 to 1,600°C to produce a silicon oxide gas,

10 introducing the silicon oxide gas into a cooling chamber through a transfer conduit which is maintained at a temperature of from higher than 1,000°C to 1,300°C, thereby causing silicon oxide to deposit on a surface of a substrate which is disposed and cooled in the cooling chamber, and

15 continuously recovering the silicon oxide deposit.

2. The method of claim 1 wherein the raw material powder mixture is a mixture comprised of a silicon dioxide powder and a metal silicon powder.

20 3. An apparatus for continuously preparing a silicon oxide powder, comprising

a charge feed means for feeding a raw material powder mixture containing silicon dioxide powder to a reaction chamber,

the reaction chamber where the raw material powder mixture is reacted to produce a silicon oxide gas,

a transfer line for transferring the silicon oxide gas from the reaction chamber to a deposition chamber,

30 the deposition chamber in which a substrate is disposed and cooled so that silicon oxide deposits on a surface of the cooled substrate, and

a recovery means for recovering the silicon oxide deposit on the substrate.